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REMARKS: Serial No. 09/524,140, filed 03/10/2000
Attached hereto is a Reply Brief (4 p., in triplicate) for filing with the U.S. Patent and Trademark Office. Please acknowledge receipt of this facsimile.

Total Number of Pages (Including This One): FIFTEEN (15)**FROM: Alan D. Christenson, Direct Dial No. (713) 632-1615****DATE: November 1, 2004****CLIENT/MATTER NO. 10991147-1 (2162-18200)**

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PATENT APPLICATION
ATTORNEY DOCKET NO. 10991147-1

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IN THE
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Qiming CHEN et al.

Confirmation No.: 5742

Application No.: 09/524,140

Examiner: E. T. Shaffer

Filing Date: 03/10/2000

Group Art Unit: 3623

Title: DISTRIBUTED OLAP-BASED ASSOCIATION RULE GENERATION METHOD AND SYSTEM

Mail Stop Appeal Brief-Patents
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL OF REPLY BRIEF

Sir:

Transmitted herewith in *triplicate* is the Reply Brief with respect to the Examiner's Answer mailed on 08/30/2004. This Reply Brief is being filed pursuant to 37 CFR 1.193(b) within two months of the date of the Examiner's Answer.

(Note: Extensions of time are not allowed under 37 CFR 1.136(a))

(Note: Failure to file a Reply Brief will result in dismissal of the Appeal as to the claims made subject to an expressly stated new grounds of rejection.)

No fee is required for filing of this Reply Brief.

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Number of pages: 14

Typed Name: Colleen F. Brown

Signature: 

Respectfully submitted,

Qiming CHEN et al.

By 

Alan D. Christenson

Attorney/Agent for Applicant(s)

Reg. No. 54,036

Date: 11/01/2004

Telephone No.: (713) 238-8000

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Serial No.:	09/524,140	§	Group Art Unit:	3623
Filed:	03/10/2000	§	Examiner:	E.T. Shaffer
For:	Distributed OLAP-Based Association Rule Generation Method And System	§	Docket No.:	10991147-1

REPLY BRIEF

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PO Box 1450
Alexandria, VA 22313-1450

Date: November 1, 2004

Sir:

Appellants hereby submit this Reply Brief in response to the Examiner's Answer dated August 30, 2004, in connection with the above-identified application.

In the Examiner's Answer, the Examiner states that the Summary of Invention in Appellants' Appeal Brief "is deficient because it fails to teach many of the key features of the claimed invention" (see Examiner's Answer, page 3, part 5). Appellants disagree and submit that the Summary includes "a concise explanation of the invention defined in the claims involved in the appeal" as required under 37 CFR 1.192. The Examiner seems to suggest that all claim limitations must be discussed in the Summary. However, 37 CFR 1.192 makes no such requirement. A Summary that addresses all the claim limitations that are pertinent to patentability could hardly be concise as required. The Summary submitted with the Appeal Brief is concise, but is not deficient as suggested by

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the Examiner. At any rate, an updated Summary of Invention including figure numbers is provided below.

SUMMARY

As discussed in Appellants' Summary of Invention, the invention provides a processing system that comprises a minimum of two layers of data warehouse/OLAP stations: LDOSs (110, 130) and a GDOS (150). The LDOSs (110, 130) are responsible for local data mining and summarization, while the GDOS (150) is responsible for merging and mining the input data from the LDOSs (110, 130), and for providing mining results to LDOSs (110, 130) for business applications. See Figure 1 and page 7, line 11 - page 9, line 3. The GDOS (150) provides mining results to LDOSs (110, 130) via a feedback process (160). See Figure 1, page 8, lines 1-4 and page 9, lines 12-23.

The processing system may be used to generate scoped association rules (159). See Figure 1, Figure 4 and page 17, line 10 - page 19, line 13. For exemplary purposes, consider the scoped associated $A \rightarrow B$ [scope = customer, region = CA, timeframe = two months]. This exemplary scoped association rule represents the trend that a customer who purchased item A also purchased item B in the state of California within the past two months. Scoped association rules are defined over a particular population or set of populations, thereby facilitating the cooperative mining of association rules between the GDOS (150) and the LDOSs (110, 130). See Figure 1 and page 17, line 10 - page 18, line 20.

The data organization provided by embodiments of the invention is described using multidimensional cubes. For example, embodiments of the invention may provide volume cubes (210), association cubes (230), population cubes (240), base cubes (220), confidence cubes (260) and support cubes (250). See Figure 6 and page 19, line 20 - page 22, line 7.

CLAIM GROUPS

With regards to the grouping of the claims, the Examiner states that "there are no additional limitations to explain why the claims are patentably distinct" (see

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Examiner's Answer, page 4, first paragraph). Appellants disagree and submit that the Arguments section of the Appeal Brief "explains why the claims of the group are believed to be separately patentable" as required under 37 CFR 1.192. Specifically, the Arguments section includes a separate argument that addresses why each claim group is patentable over the references cited by the Examiner. Also, the Grouping of Claims section in Appellants' Appeal Brief identifies claim 26 as a separate claim group. However, it is claim 28 and not claim 26 that is identified and argued in the Arguments section of Appellants' Appeal Brief. Appellants clarify that the claims groups to be considered separately for purposes of Appeal are: (1) claims 1-7 and 26-27; (2) claims 8-16; (3) claims 17-25; and (4) claims 28-29.

In the Appeal Brief, Appellants argued that the patentability of claim 1 is based, in part, on "cubes" that "comprise a plurality of bases from distinct data sources" and on "scoped association cubes." In contrast, Appellants argued that the patentability of claims 8, 17 and 28 is based, in part, on "scoped association rules" and on distributing processing to local stations (or local servers) and to at least one global station (or global server). Additionally, claim 17 requires "feeding back said global profile cubes and association rules from said [global server] to said plurality of [local servers] for their business operations." Neither Megiddo nor Castelli teaches or suggests "feeding back said global profile cubes and association rules from said [global server] to said plurality of [local servers] for their business operations" as required in claim 17. For at least this additional reason, the Examiner erred in rejecting claim 17 and its dependent claims.

Appellants therefore respectfully request that the Examiner's rejections be reversed, and the claims set to issue.

It is believed that no extensions of time or fees are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned

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under 37 CFR 1.136(a), and any fees required (including fees for net addition of claims) are hereby authorized to be charged to Hewlett-Packard Development Company's Deposit Account No. 08-2025.

Respectfully submitted,



Alan D. Christenson
PTO Reg. No. 54,036
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Serial No.:	09/524,140	§	Group Art Unit:	3623
Filed:	03/10/2000	§	Examiner:	E.T. Shaffer
For:	Distributed OLAP-Based	§	Docket No.:	10991147-1
	Association Rule	§		
	Generation Method And	§		
	System	§		

REPLY BRIEF

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Respectfully submitted,



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